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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,948	03/12/2004	Tongbi Jiang	2950.6US (96-0552.05/US)	8012

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EXAMINER	
BLUM, DAVID S	

ART UNIT	PAPER NUMBER
2813	

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/799,948	JIANG ET AL.	
	Examiner	Art Unit	
	David S Blum	2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 June 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/12/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

This action is in response to the preliminary amendment filed 6/7/04.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,506,628. Although the conflicting claims are not identical, they are not patentably distinct from each other because the only difference between the patented claims and the claims of the instant application is that the present application includes “of plurality of leads on a lead frame” and “the at least one semiconductor die is to be separated from a semiconductor wafer having a plurality of dice thereon” and US 6,506,628 recites “ providing a semiconductor wafer having a plurality of semiconductor dice formed thereon” and the next

positive step in both claims (1 and 1) separates the dice. This is obvious as it is well known in the art that devices are formed in mass numbers on a wafer and then diced from the wafer. Thus, it would be known to one that the separation of dice from the wafer in US 6,506,628 would be from a semiconductor wafer having a plurality of semiconductor dice formed thereon.

3. Claims 1-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,706,599. Although the conflicting claims are not identical, they are not patentably distinct from each other because the only difference between the patented claims and the claims of the instant application is that the present application includes "of plurality of leads on a lead frame" and "determining" and US 6,706,599 recites " a lead frame having a plurality of leads" and "identifying". The next positive step in both claims (1 and 1) tests the dice. This is obvious as it is well known in the art that devices are formed in mass numbers on a wafer and then diced from the wafer. Thus, it would be known to one that the separation of dice from the wafer in US 6,706,599 would be from a semiconductor wafer having a plurality of semiconductor dice formed thereon. Identifying criteria and determining criteria share the same scope within the invention.

4. Claims 1-15, 16-28, and 29-40, 41-47, 48-53, and 54--65 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20, 21-39, and 40-51, 54, and 56 of U.S.

Patent No. 6,017,776. Although the conflicting claims are not identical, they are not patentably distinct from each other because the only difference between the patented (independent) claims 1 and 6 and 21 and the claims 1 and 16 and 41 of the instant application is that the present application includes "the (at least one) (claims 1 and 1 only) semiconductor die is to be separated from a semiconductor wafer having a plurality of dice thereon" and US 6,506,628 recites " providing a semiconductor wafer having a plurality of semiconductor dice formed thereon" and the next positive step in both claims (1 and 1) separates the dice. This is obvious as it is well known in the art that devices are formed in mass numbers on a wafer and then diced from the wafer. Thus, it would be known to one that the separation of dice from the wafer in US 6,506,628 would be from a semiconductor wafer having a plurality of semiconductor dice formed thereon.

Claim 29 of the instant application includes the "the semiconductor die provided from a semiconductor wafer having a plurality of semiconductor dice thereon" and US 6,017,776, claim 40 recites "separating the semiconductor device from a semiconductor wafer. This is obvious as it is well known in the art that devices (equivalent die) are formed in mass numbers on a wafer and then diced from the wafer. Thus, it would be known to one that the separation of a device from the wafer in US 6,017,776 would be from a semiconductor wafer having a plurality of semiconductor dice formed thereon.

Although US 6,017,776 recites limitations that are not in the instant application (dependent claim 52 where the adhesive is a liquid or claim 53 where the

adhesive is a paste, all of the limitations of the instant application are recited in the claims of US 6,017,766.

5. Claims 1-65 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-45 of U.S. Patent No. 6,200,833. Although the conflicting claims are not identical, they are not patentably distinct from each other because the only difference between the patented claims 1 and 6, 17, and 31 and the claims 1, 16 29, 41, and 54 of the instant application is that the present application includes "the (at least one) (claim 1 only) semiconductor die is to be separated from a semiconductor wafer having a plurality of dice thereon" and US 6,200,833 recites " providing a semiconductor wafer having a plurality of semiconductor dice formed thereon" and the next positive step in both claims (1 and 1) separates the dice. This is obvious as it is well known in the art that devices are formed in mass numbers on a wafer and then diced from the wafer. Thus, it would be known to one that the separation of dice from the wafer in US 6,506,628 would be from a semiconductor wafer having a plurality of semiconductor dice formed thereon.

6. Claims 1-65 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-45 of U.S. Patent No. 6,312,977 Although the conflicting claims are not identical, they are not patentably distinct from each other because the only difference between the patented claims 1 and 6, 17, 29, 41, and 54 and the claims 1, 16 and 31 of

the instant application is that the present application includes "the (at least one) (claim 1 only) semiconductor die is to be separated from a semiconductor wafer having a plurality of dice thereon" and US 6,200,833 recites " providing a semiconductor wafer having a plurality of semiconductor dice formed thereon" and the next positive step in both claims (1 and 1) separates the dice. This is obvious as it is well known in the art that devices are formed in mass numbers on a wafer and then diced from the wafer. Thus, it would be known to one that the separation of dice from the wafer in US 6,506,628 would be from a semiconductor wafer having a plurality of semiconductor dice formed thereon. Additionally, claims 1 and 16 of the instant application recite "testing each semiconductor die of the semiconductor wafer to determine if the criteria for the acceptable semiconductor die are included in each semiconductor die". Claims 1 and 17 of US 6,312,977 recite "identifying a semiconductor die having said identifying criteria". The term testing is broad and one skilled in the art would know that the only way to determine if an acceptable criteria is present in a sample is to perform a test. Thus is obvious to one skilled in the art that identifying (in this case) is synonymous with testing.

7. Claims 16-28, 29-40, 41-53, and 54-65 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 16, 19-30, and 31, 34-44, and 1-6, 14, and 16-19, 26-27 and 29-40 respectively of U.S. Patent No. 6,706,599. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 16

contains the limitation "a plurality of leads" in lieu of "a lead frame having a plurality of leads. Also, the elimination of the positive step of separating does not change the scope of the claim as the remaining positive steps refer to separating as though it is (and it is) still a positive step. In addition, claims 48 and 54 add the limitation of "a predetermined pattern". Although not present in the limitations of the 6,706,599 claims, it is obvious that the equipment used does not apply the adhesive or paste in a random fashion, but in a predetermined pattern. Therefore, the additional language does not change the scope of the claims, only the language used. Claims 29, 41, 48, and 54 contain similar language changes to the claims without changing the scope of the claims of 6,706,599 and are therefore rejected for obvious double patenting.

8. Claims 48-53 and 54-65 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 16-19, 26-27 and 29-40. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

It is obvious that the equipment used does not apply the adhesive or paste in a random fashion, but in a predetermined pattern. Therefore, the additional language of "predetermined pattern" in claims 48 and 54 does not change the scope of the claims, its metes and bounds, but only adds language used that is obvious even though unstated.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Blum whose telephone number is (571)-272-1687) and e-mail address is David.blum@USPTO.gov .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead Jr., can be reached at (571)-272-1702. Our facsimile number all patent correspondence to be entered into an application is (703) 872-9306. The facsimile number for customer service is (703)-872-9317.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David S. Blum
October 13, 2004